

CLAIMS

What is claimed is:

1. A mattress system, comprising:
 - A) a mattress, including
 - (i) a core layer providing a base support; and
 - (ii) a top layer of viscoelastic foam, disposed atop the core layer, having a density of from about 3.0 to about 4.5 lb/ft³.
2. A mattress system in accordance with claim 1, wherein the core layer comprises foam material having a density of from about 2.0 to about 2.7 lb/ft³.
3. A mattress system in accordance with claim 2, wherein the core layer has a thickness of from about 3" to about 7".
4. A mattress system in accordance with claim 2, wherein the core layer of foam material is selected from the group consisting of polyurethane foam, latex foam and a combination of polyurethane foam and latex foam.
5. A mattress system in accordance with claim 1, wherein the top layer has a thickness of from about 2" to about 4".
6. A mattress system in accordance with claim 1, wherein the top layer is attached to the core layer with a chemical adhesive.
7. A mattress system in accordance with claim 1, further comprising a removable cover surrounding the core layer and the top layer.
8. A mattress system in accordance with claim 1, wherein the viscoelastic foam layer is configured to provide a substantially uniform response over a room temperature range of from about 55° F to about 85° F.
9. A mattress system in accordance with claim 1, further comprising:
 - B) a mattress support, configured to support the mattress, including:
 - (i) a perimeter frame;

(ii) a plurality of slats, spanning transversely across the perimeter frame and positioned to directly contact a bottom surface of the mattress, including at least seven pairs of adjustable slats, each pair being positioned to support a specific area of a body disposed atop the mattress;

5 (iii) a plurality of stiffener slats, spanning transversely across the perimeter frame, each stiffener slat being disposed beneath a corresponding pair of adjustable slats; and

(iv) at least one moveable adjuster clip, interconnected between each stiffener slat and the corresponding pair of adjustable slats, configured to be

10 selectively moveable across the span of the slats, so as to adjust a relative flexural stiffness of the corresponding pair of adjustable slats.

15 10. A mattress system in accordance with claim 9, further comprising:

(a) a center support, longitudinally bisecting the perimeter frame; and wherein

(b) the plurality of slats comprises first and second pluralities of slats transversely spanning between a side of the perimeter frame and the center support, each plurality of slats including

20 seven pairs of adjustable slats positioned to support a specific area of a body disposed atop the mattress,

seven stiffener slats disposed beneath a corresponding pair of adjustable slats, and

25 at least one moveable adjuster clip, interconnected between each stiffener slat and the corresponding pair of adjustable slats, configured to be selectively moveable across the span of the slats, so as to adjust the relative flexural stiffness of the corresponding pair of adjustable slats;

so as to allow independent stiffness adjustment of the support system on each side of the center support.

30 11. A mattress system in accordance with claim 9, wherein, at least one of the pairs of adjustable slats is positioned to support a shoulder region of the body disposed atop the mattress.

12. A mattress system in accordance with claim 1, further comprising:

5 C) a pillow, including

 (i) a body of viscoelastic foam, having a contoured top side including a ridge, and a bottom side with an insert pocket; and

 (ii) a foam insert, configured to be inserted into the insert pocket so as to increase the stiffness of the pillow below the ridge.

10 13. A mattress system in accordance with claim 12, wherein the insert pocket comprises a first insert pocket and a second insert pocket, and the foam insert comprises two foam inserts.

15 14. A mattress system in accordance with claim 13, wherein the contoured top side further comprises:

 (a) a back support ridge, parallel to and above the first insert pocket, to support a user's head and neck when the user is lying on the user's back; and

 (b) a side support ridge, parallel to and above the second insert pocket, to support the user's head and neck when the user is lying on the user's side, whereby the foam is prevented from collapsing, so that the user's neck will be better supported.

20 15. A mattress system in accordance with claim 13, wherein the foam inserts comprise elongate pieces of polyurethane, having a semicylindrical cross-section.

25 16. A mattress system in accordance with claim 12, wherein the viscoelastic foam material of the body is configured to provide a substantially uniform response over a room temperature range of from about 55° F to about 85° F.

30 17. A mattress, comprising:

 a) a core layer of foam material, having a core density primarily configured to support a human body;

 b) a top layer of viscoelastic foam, disposed atop the core layer, having a composition that maintains substantially uniform viscoelastic response over a room temperature range of from about 55° F to about 85° F.

18. A mattress in accordance with claim 17, wherein the core layer has a density of from about 2.4 to 2.7 lb/ft³, and the top layer of viscoelastic foam has a density of from about 3.0 to about 4 lb/ft³.

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19. A mattress in accordance with claim 17, wherein the viscoelastic response of the top layer varies by less than about 15% within a range from about 30° F to about 100° F.

20. A pillow, comprising:

10 a) a body of viscoelastic foam, having a contoured top side including a ridge, and a bottom side with at least one insert pocket, the viscoelastic material being configured to provide a substantially uniform viscoelastic response over a room temperature range of from about 55° F to about 85° F;

15 b) a cover, surrounding the body, having an opening configured to allow access to the at least one insert pocket; and

c) at least one foam insert, configured to be inserted into the at least one insert pocket below the ridge, and thereby increase the stiffness of the pillow below the ridge.